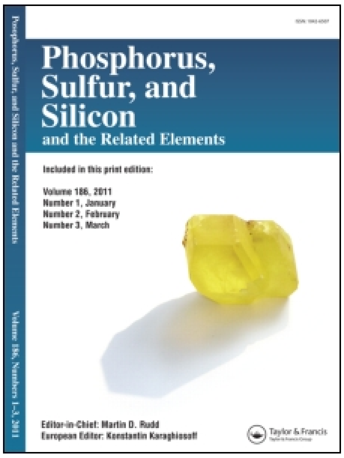

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Complexes Of Thiophosphoryl Compounds with $AgNO_3$

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COMPLEXES OF THIOPHOSPHORYL COMPOUNDS WITH $AgNO_3$.

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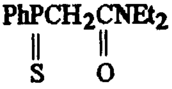
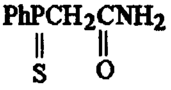
Under conditions of interphase catalysis complexing agents L^1, L^2 and L^3 have been synthesized[1]. Using spectral and X-ray methods complex formation of thises ligands with $AgNO_3$ has been studied.



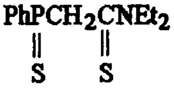
$\mathrm{Ph}\underset{\underset{\displaystyle S}{\|}}{\mathrm{P}}\mathrm{CH_2}\underset{\underset{\displaystyle O}{\|}}{\mathrm{C}}\mathrm{NEt_2}$

L^1



$\mathrm{Ph}\underset{\underset{\displaystyle S}{\|}}{\mathrm{P}}\mathrm{CH_2}\underset{\underset{\displaystyle O}{\|}}{\mathrm{C}}\mathrm{NH_2}$

L^2



$\mathrm{Ph}\underset{\underset{\displaystyle S}{\|}}{\mathrm{P}}\mathrm{CH_2}\underset{\underset{\displaystyle S}{\|}}{\mathrm{C}}\mathrm{NEt_2}$

L^3

Each ligand forms a complex with Ag^+ ion by means of two donor centers: S and O atoms (two S atoms in case of L^3). First of all in a solution P=S group of the ligands is coordinated by Ag ion. Crystalic complex $[AgL^1NO_3]_2$ is a center symmetric dimer, in which S atoms are bridging and Ag ion has tetrahedral environment (X-ray data)[2]. Complex $Ag\,L^2NO_3$ is stabilized by H-bonds. In contradistinction to L^1 and L^2 ligand L^3 forms a soluble complex $[Ag(L^3)_2]NO_3$, lgK=3.9 (spectrophotometric measuring in CH_3CN).

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